Teacher Education - PHYSICS

Tennessee teaching licensure (Grades 6-12) is available with modifications to the Physics track and the King Core, and successful completion of the Secondary Education minor. Licensed teachers in secondary education are in great demand in all fifty states, and the areas of science, mathematics, English as a second language, and foreign languages are considered critical need areas in K-12 public education by all states.

Declaration of the minor and early and frequent advisement is essential to timely completion of degree and licensure requirements. Students seeking teacher licensure will be assigned a secondary education advisor in the Department of Teacher Education, in addition to their major advisor. See the “Admission to the Teacher Education Program” section of this catalog or contact the Administrative Assistant in School of Education for eligibility criteria, admissions procedures, and timelines.

Core Curriculum Requirements
Physics majors seeking teaching licensure should fulfill specified categories of the King Core Curriculum by taking the courses indicated below. See the “The Core Curriculum” section of the catalog for additional details.

**Science**

CHEM 1110
General Chemistry I .................................................................4 s.h.

**Quantitative Literacy**

MATH 2350
Calculus I .........................................................................................4 s.h.

**Literature**

Choose from the following courses (pair with history)..............4 s.h.

ENGL 2171
Western Literature I (4 s.h.)
ENGL 2172
Western Literature II (4 s.h.)

**History**

Choose from the following courses (pair with literature).............4 s.h.

HIST 2171
Western Civilization in Global Context I (4 s.h.)
HIST 2172
Western Civilization in Global Context II (4 s.h.)
**Human Culture**
In addition to satisfying the language requirement:
PSCI 2120  
Cultural Diversity in America........................................4 s.h.

**BA in Physics Track Requirements for Teaching Licensure**
PHYS 2210 and 2220  
General Physics I and II ........................................4, 4 s.h.
PHYS 3010  
Theoretical Mechanics .............................................4 s.h.
PHYS 3030  
Electricity and Magnetism .........................................4 s.h.
PHYS 3060  
Introduction to Modern Physics ..................................4 s.h.
PHYS 3502  
Experimental Methods ..............................................2 s.h.
PHYS 4201  
Advanced Topics......................................................2 s.h.

*Choose from the following courses* .................4 s.h.
BIOL 3600  
Human and Mammalian Physiology (4 s.h.)
BIOL 3210  
Human and Vertebrate Comparative Anatomy (4 s.h.)
BIOL 3500  
Histology (4 s.h.)

*Choose from the following courses* ..................4 s.h.
DMIS 2015  
Introduction to Computer Science (4 s.h.)
MATH 1500  
Cryptology: The Science of Secret Writing (4 s.h.)
MATH 2100  
Programming with Graphics, Symbols, & Text (2 s.h.)
MATH 2480  
History of Mathematics (2 s.h.)
MATH 3120  
Number Theory (2 s.h.)
IDST 4500  
Interdepartmental Science and Math seminar ...............2 s.h.
MATH 2360  
Calculus II ...............................................................4 s.h.
TCOM 2200  
Technical Communication ..........................................4 s.h.
Secondary Education Minor
EDUC 2030
Introduction to Teaching, K-Grade12 ........................................ 2 s.h.
EDUC 2031
Introduction to Teaching Practicum, K-Grade 12 ....................... 1 s.h.
EDUC 2100
Survey of Exceptional Children .................................................. 4 s.h.
EDUC 2370
Reflective Teaching: Planning for Classroom Instruction .......... 3 s.h.
EDUC 2900
Foundations of Education .......................................................... 3 s.h.
EDUC 2950
Technology for Teachers ......................................................... 2 s.h.
EDUC 3390*
Secondary Curriculum and Methods............................................. 3 s.h.
EDUC 3590*
Content Area Reading .............................................................. 3 s.h.
EDUC 3600*
Assessment and Evaluation ....................................................... 3 s.h.
EDUC 4490*
Student Teaching, Grades 6-10 ................................................ 5 s.h.
EDUC 4500*
Student Teaching, Grades 9-12 ................................................ 5 s.h.
EDUC 4950*
Capstone Seminar, Grades K-12 .............................................. 2 s.h.
PSCI 2120
Cultural Diversity in America...................................................... 0-4 s.h.
PSYC 3320
Adolescent Development .......................................................... 4 s.h.
EDUC 4990*
Comprehensive Assessment (passing state-required
Praxis II exams, successful portfolio completion, successful
portfolio defense) ................................................................... 0 s.h.

* Requires admittance to the Teacher Education Program

Summary of Total Credits
Core Curriculum................................................................. 42 s.h.
Track Requirements ........................................................... 42 s.h.
Secondary Education Minor................................................. 40-44 s.h.
Electives ............................................................................. 2 s.h.
Minimum to Complete Licensure Program ......................... 126 s.h.